

Appl. No. : 09/845,849
Filed : APRIL 30, 2001

AMENDMENTS TO THE CLAIMS

B5
1. (Currently Amended) A genetically modified plant comprising in its genome at least one ~~exogenous antisense FT encoding nucleotide~~ antisense sequence that inhibits expression of a FT gene having a nucleotide sequence as set forth in SEQ ID NO: 1, and wherein said plant has a ~~in its genome and having the phenotype of delayed flower development.~~

Claims 2-5 (Cancelled)

B6
6. (Currently Amended) The genetically modified plant of claim 1, wherein the at least one antisense ~~exogenous FT encoding nucleotide sequence comprises~~ has at least 95% identity to a nucleotide sequence set forth in SEQ ID NO:3.

7. (Cancelled)

B7
8. (Currently Amended) The genetically modified plant of claim 1, wherein the ~~structural gene~~ at least one antisense sequence is operably associated with a regulatory nucleotide sequence.

9. (Original) The genetically modified plant of claim 8, wherein the regulatory nucleotide sequence is a promoter.

10. (Original) The genetically modified plant of claim 9, wherein the promoter is a constitutive promoter.

11. (Original) The genetically modified plant of claim 9, wherein the promoter is an inducible promoter.

B8
12. (Currently Amended) The genetically modified plant of claim 1, ~~wherein the nucleic acid further comprises~~ further comprising a selectable marker genetically linked to the at least one antisense sequence.

13. (Currently Amended) The genetically modified plant of claim 1, wherein the plant is a dicotyledonous plant.

14. (Currently Amended) The genetically modified plant of claim 1, wherein the plant is a monocotyledonous plant.

15. (Currently Amended) A plant cell derived from the genetically modified plant of claim 1.

Appl. No. : 09/845,849
Filed : APRIL 30, 2001

16. (Currently Amended) Plant tissue derived from the genetically modified plant of claim 1, wherein the plant tissue comprises in its genome at least one antisense sequence that inhibits expression of a FT gene having a nucleotide sequence as set forth in SEQ ID NO: 1.

17. (Currently Amended) A seed which germinates into a plant comprising in its genome at least one exogenous antisense FT encoding nucleotide antisense sequence that inhibits expression of a FT gene having a nucleotide sequence as set forth in SEQ ID NO: 1, and wherein said plant has a in its genome and having the phenotype of delayed flower development.

18. (Currently Amended) The seed of claim 17, wherein the ~~least one exogenous antisense FT encoding nucleotide~~ at least one antisense sequence has at least 80% 95% sequence homology identity to SEQ ID NO:3.

19. (Currently Amended) A vector containing a nucleotide sequence comprising at least one antisense FT sequence operably associated with a promoter, wherein said vector, when introduced into a plant, encodes at least one antisense molecule that inhibits expression of a FT gene having a nucleotide sequence as set forth in SEQ ID NO: 1 and wherein said plant exhibits delayed that inhibits flower development in comparison to a wildtype plant ,operably-associated with a promoter.

20. (Currently Amended) The vector of claim 19, wherein the at least one antisense FT sequence has at least 80% 95% sequence homology identity to SEQ ID NO:3.

21. (Currently Amended) The vector of claim 19, wherein the vector comprises a T-DNA derived sequence vector.

22. (Cancelled)

23. (Original) The vector of claim 19, wherein the promoter is a constitutive promoter.

24. (Original) The vector of claim 19, wherein the promoter is an inducible promoter.

Claims 25-34 (Cancelled)

35. (New) A method of producing a genetically modified plant having delayed flowering, comprising:

Appl. No. : 09/845,849
Filed : APRIL 30, 2001

contacting plant cells with a vector encoding an antisense sequence that interferes with expression of a FT gene having a nucleic acid sequence set forth in SEQ ID NO: 1 to create transformed plant cells;

growing plants from said transformed plant cells; and

screening for a plant exhibiting delayed flower development relative to wildtype plants.

36. (New) The method of Claim 35, wherein said antisense sequence has at least 95% identity with the nucleic acid sequence set forth in SEQ ID NO: 3.

37. (New) The method of Claim 35, wherein said antisense sequence is linked to a promoter.

38. (New) The method of Claim 37, wherein said promoter is a constitutive promoter.

39. (New) The method of Claim 37, wherein said promoter is an inducible promoter.
